



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,337	06/27/2001	Daniel W. Doll	1082-503	1137
7590	05/21/2004			EXAMINER MILLER, EDWARD A
Joseph A. Walkowski Traskbritt, PC P. O. Box 2550 Salt Lake City,, UT 84110			ART UNIT 3641	PAPER NUMBER

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/893,337	DOLL ET AL. <i>31</i>	
	Examiner Edward A. Miller	Art Unit 3641	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 06 February 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-32 and 34-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-32 and 34-44 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____ .                                  |

Art Unit: 3641

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 06, 2004 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-32 and 34-44, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Otani et al. '969 in view of Aubert et al. '668, Shepherd '000, French 465,082 and 349,635, German 100,522.

Otani et al. teach the basic invention of melt cast explosives with dinitro aromatics, oxidizer, etc. In col. 1, lines 60-62, the aromatic dinitro compound is in the liquid form at the time of mixing. Note also col. 2, lines 40-59, where various of these compounds are taught for use with an oxidizer of ammonium nitrate, e.g., at 50% from line 43, and the dinitro compounds may also be up to 50% at line 58. Especially in view of the secondary references, variation of the various notoriously well known ingredients, amounts and so forth would have been obvious. Note that the broad recitations read on many and various dinitro aromatics as taught in the references, and that "oxidizer" reads on various oxidizers, including organic ones such as TNAZ of Aubert et al., particularly in broad claim

1. Shepherd, at col. 4, lines 5-6 suggests DNT, and at lines 14-18 following, that the amounts may be in the general range claimed by applicants. In French 465,082, page 1, lines 15-28, especially at lines 26-27, the mono-, di- or tri- nitro derivatives of benzene, toluene and analogs may be used. While the specific examples use the trinitro compounds, and divergent amounts than as claimed here, this does not lessen the teaching. Further, in French 349,635, note the examples on page 3,

Art Unit: 3641

lines 30-47. At least as to the broad claims, this may be the epitome of obviousness, anticipation, as the claims are best understood, and as now broadly presented. *In re Pearson*, 181 USPQ 641 (CCPA 1974). Further, in German 100522, note the examples on pages 3-4, where the amounts of similar compounds may be widely varied. It is well settled that optimizing a result effective variable is well within the expected ability of a person or ordinary skill in the subject art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Indeed, some of these references may be the epitome of obviousness, anticipation, as to the broader claims. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

The properties or results of the compositions are inherent in the compositions. Where the product appears to be the same or only slightly different, the properties recited would appear to be inherent. The Office does not have testing facilities to determine such. The burden falls on applicant to show that the prior art products do not necessarily or inherently possess the claimed properties. *In re Thorpe*, 777 F.2d 695, 697, 227 USPQ 964, 966; *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596; *In re Best*, 562 F.2d 1252, 1255; 195 USPQ 430, 433-434; *In re Brown*, 459 F.2d 531, 173 USPQ 685.

See the indefiniteness rejection in paragraph 4 below. It is not clear what the claims require, so applicants' arguments are not persuasive, as not relating to the claims as broadly understood.

4. Claims 1-32 and 34-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims cannot be understood. Applicants urge that the claims require certain ingredients and in high amounts. However, consider claims 43-44 for the most extreme situation. The amounts of the recited ingredients appears to be required to be 99%. However, the scope of

Art Unit: 3641

the claims is “comprising”, which allows addition of other ingredients and in major amounts. See MPEP 2111.03, wherein: “*Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948) (“comprising” leaves ‘the claim open for the inclusion of unspecified ingredients even in major amounts’).” With 99% of everything specified, the scope of “comprising” makes no sense whatever. It is inconsistent with a correct recitation of 99% of the ingredients. Thus, it is not clear whether the amounts are not actually required, or if the claims scope is actually intended to be “consisting essentially of” or consisting of, which “limits the scope of a claim to the specified materials or steps “and those that do not materially affect the basic and novel characteristic(s)” of the claimed invention. *In re Herz* 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976) (emphasis in original).” [MPEP 2111.03.] Further, the language of the last two lines of claim 1, e.g., recites that at least 95% of the composition “comprises a combination of the one or more organic binders and the one or more oxidizers.” However, the term “comprises” clearly admits of added ingredients, even in major amounts, as above, so even though argued by applicants differently, this language must be construed broadly, e.g., to allow addition of other ingredients. It is noted that the language used does not recite that at least 95% of the composition “is . . .” or “consists of . . .”, but instead recites “comprises . . .”. Thus, the metes and bounds of the claims is indefinite, notwithstanding applicants’ arguments.

Similarly, the remaining claims appear to be defective in the same manner, as to requiring (or not) 95% of specific, fixed ingredients. Claim 23 further illuminates this, as this claim requires the binder include a heterocyclic compound, but there is neither any antecedent for such in claim 15 from which it depends, nor is there any apparent requirement that such a heterocycle be a nitro-aromatic. From claim 1, for example, the binder is selected from mono- and di- nitro aromatics, and the other broad claims include similar language. This would appear to preclude any binder but

Art Unit: 3641

mono- or di- nitro-substituted aromatics as the binder. This might be particularly the case, since the last several lines of the independent claims might require 95% combined binder and oxidizer, which is argued by applicants to require the recited nitro compounds and that such language defines over the prior art with other ingredients. In short, the metes and bounds of the claimed invention cannot be determined as currently written.

In several places, N-methyl-nitroaniline, e.g., is set forth as a processing aid, such as in claims 7-8, while it is a mono-nitro-aromatic compound, and thus a binder. This may become an issue, in view of the limitations on ingredients of 95% or more(?), whether this processing aid is part of the binder and thus the 95+% ingredients. The entirety of the claims is such that one cannot reasonably determine the metes and bounds of the claimed invention.

5. Any inquiry concerning either this or an earlier communication from the Examiner should be directed to Examiner Edward A. Miller at (703) 306-4163. Examiner Miller may normally be reached Monday-Thursday, from 10 AM to 7 PM.

If attempts to reach Examiner Miller by telephone are unsuccessful, his supervisor Mr. Carone can be reached at (703) 306-4198. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Miller/em  
October 30, 2003



EDWARD A. MILLER  
PRIMARY EXAMINER